# rizona Miner.

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PRESCOTT, A. T.

JNO. HOWARD. torney and Counsellor at Law, Prescott.

DR. E. P. HOWARD. at Fort Whipple Hospital. 7

HENRY W. FLEURY, NOTARY PUBLIC. ESCOTT. ARIZONA TERRITORY

WM. J. BERRY,

orney and Counsellor at PRESCOTT, ARIZONA. on Cortez Street, fronting the Plana. 36m

FRANCISCO ADVERTISEMENTS

SAN FRANCISCO.

s house possesses all the requirements of a lass hotel, its spacious reading room, with a mineral cabinet, and extensive collections of mens from the different mining regions of acide coast—Branch Telegraph Office con-ing with lines throughout the country—and stand—all contributing to make it the head-

Table of this House shall not be excelled Board, three dollars per day. LEWIS LELAND & CO.,

SANSOME STREET,

er of HALLECK, SAN FRANCISCO.

"THE EXCHANGE"

OOB FAMILY HOTEL, containing Two He S to Sacramento streets, and is FIRE-PROOF Prices low to suit the times T. SARGENT, Proprietor,

### V. CUSHING,

gent for the purchase and shipping of HINERY OF ALL KINDS. cial attention given to Quartz Mill Machin-Findings, and Miners' Material of every tion. Being a Practical Machinist, and my personal attention to the execution of I can guarantee the best class of work at lest prices in the city. Having completed ments with Horace McMurtric & Co., 32 kreet, Boston was because in New York in the eastern States will be reliably furn-th costs of Mining Machinery of every de-

on application.
by permission to Governor F. F. Low.
der, Stockton. Jacob Underhill & Co.,
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SAN FRANCISCO,

UARTZ MILL, SAW MILL,

### Mining Items.

DESULPHURIZATION\_OLIVER'S PROCESS.

We have several times alluded to the fact \$5,00 that a person named Oliver has lately been selling, in Nevada and Placer counties "re ceipts " for a new process for desulphurizing anriferous sulphurets. A late number of the of March 15th gives the annexed history of Nevada Gazette says that the process consists a Reese River mine: in mixing in the pulverized sulphurets a certain quantity of the following mixture: 94 scarcely believe that it will not have many parts of slacked lime, and 6 parts of carbonate parallels on Lander hill in the good time soda. After roasting (the length of time not given) the mass is thrown into salt water, the 3d of April, 1863, by the Shoshone Comslightly acidulated with muriatic acid. The pany. phurets is not given.

would be unstacked time and nitrate sodu. Un- Swansca from San Francisco. About this slacked lime is better than slacked, because it will combine more readily with the sulphur, which must be its only value. Nitrate of soda is better than the carbonate of soda, because the former contains double the quantity of oxygen which the latter does, and it sunk to the depth of one hundred and fifty moreover costs less than half as much. The feet, at which point levels were run and the only advantage of either consists in the rea-extraction of ore commenced. How well the diness of their decomposition, to form with the sulphur, a sulphate of soda. In either following figures from an official source will case, as well as in cost, the nitrate possesses twice the value of the carbonate.

The lime will probably be disadvantageous in any shape, from the fact that when silicic \$211,217; amount of bullion yielded and acid is present, (as it always will be in large operations), in the great heat necessary for throwing off the last equivalent of sulphur, it will form a silicate of lime which will coat the gold so as to prevent its amalgamation. These 8000 tons were extracted from a depth Immersion in acidulated liquor, as is done in of 150 to 350 feet. The average yield per Oliver's process, will not remove the silicate. ton of this large amount is \$220 58, which Trituration will with difficulty do it.

This is one of the disadvantages which often arises from roasting auriferous ores in the year 1866. In the earlier working of open heaps. Whenever lime is present in the the Great Eastern and down to the opening rock, the excessive heat in the central portion of the shaft, the ore that had been extracted of the heap will be sure to form silicates, yielded about \$30,000. This little history which will so infilm the go d as to render a of the Great Eastern recalls the tale of the thorough amalgamation almost impossible, cave of Aladdin in which was hidden the except by long continued trituration.

Perhaps Oliver's process may work well in the labratory, where the heat can be kept under control and the process carefully watched; but we believe that experience has hitherto shown that such processes (for they are not new) are not practical on a

quivalent to the increased cost of the chem- would hesitate and tremble before entering icals and the increased manipulation in their upon a journey thither Say, for instance, use. If the experience of any person should our neighboring city, Virginia, within its

### TEMPERING MINING PICKS.

can be put, which so effectually tests its value as in mining picks. The tempering of a west by Stinking Water, Rattlesnake and pick is a very nice piece of work, and should Hell Gate. Whew! Yet we cannot doubt be done with great care. In the first place that our neighbors are confident of surviving a good deal of charcoal fire is necessary, next all their surroundings. good steel, then a good light hammer, with a smooth faced anvil, and lastly a man is needed with a good keen eye, considerable experience and judgment. No good pick can News has the following be turned out if any of the above essentials Since the great Comstock has revealed its are wanting in the process.

mered endwise, nor raised above a full red mammoth bricks—the largest, if we recollect heat. The steel should moreover be heated right, was the six thousand dollar one from quickly, as long exposure to the heat-even the Gould & Curry employees, presented to if that heat is not excessive injures its tex- the Sanitary Commission. The metal was ture. Many blacksmiths find great difficulty principally silver, and its size was cleven in tempering picks, because they do not inches in length, six in width and five choose good steel. After being heated, the in height. The next largest and most valuapick must be worked with care, special pains ble brick we have any account of, is the one being taken, in drawing it out, to hammer cast in October, by Edwards & Wiegand, on all sides alike—in one place as much as from Imperial Amalgam, which contained

heated in the blaze of a charcoal fire until \$12,065 10. red hot, and then plunged into cold rain water, and kept there until it is nearly cold; but if kept too long in the water or until it is quite cold, the corners are liable to fly off. Some blacksmiths use salt water. No salts, of any kind, should exist in the water; but vancement of Science, at Buffalo, August 16, warm, a little ice should be thrown in to contributed by Prof. J. S. Newberry. The chill it, the tempering will be all the better. Professor remarked that great diversity of Pure soft water for hardening will make a opinion existed as to the causes which had

close to the edge, and then up each side about world, if the disputants could meet on com an inch. By so doing the corners will be less mon ground, and each study the phenomena rect, Boston, and houses in New York, pared to furnish Machinist's Tools of exciption, Cotton and Woollen Mill Machinist Machinist's prices have been gathered from various sources; the discord. He had spent some years on the mostly from writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the Scientific Aprel of the for West and the form writers in the scientific Aprel of the scientific Apr mostly from writers in the Scientific Ameri-can, at different times. Only such as have he felt confident that any one who would go Should the careful experience of any of our readgree with him that the presence or absence ders disprove anything of the above, and sug- of forests, as a general rule, depended on the gest anything new, we should be happy to re-port the same. Good, well proportioned and tral portions of this continent, as others, was well tempered picks, in mining operations, comparatvely dry, and was consequently, is a most important consideration; and their treeless, except on the mountain belts, which unskilful hands .- Ib.

time there has been a necessity for some forest. means whereby ore that required roasting to Along the line where the treeless and fordesulphurize could be worked without cost- est districts meet, local causes determined UARTZ MILL, SAW MILL, taught. Mr. O'Harra, of Empire, has succeeded in inventing a furnace which promises ered the more porous and absorbent to give the requisite results at a reduced soils, while level surfaces, with a fine anprice of more than five hundred per cent. porous soil—sometimes very wet, and some-He has built (and has in successful opera-times very dry—sustained only a growth of interior this coast of the celebrated "Tyler He has built (and has in successful operation) a furnace near Empire, fifty feet long, take in the Atlantic States and on this Coast to along the general chamber in which the ore is introduced, and which regulates the heat substance desulphurized. Over and through this furnace are drums driven by one horse power, runs an endless chain with half sweeps, with education and slight causes formed to the context of the power, runs an endless chain with half sweeps, with education and slight causes formed to the context of the cause of the causes limiting the growth of trees could be removed and their forest area extended. The force of nature was here nicely balanced, and slight causes formed to the context of the cause of that a steady roasting can be had and the substance desulphurized. Over and through this furnace are drums driven by one horse power, runs an endless chain with half sweeps, with convex fans that, passing with slow rates through the ore, turns, mixes and exposes to the heat each and every particle, and at the to the heat each and every particle, and at the to the heat each and every particle, and at the to the heat each and every particle, and at the to the heat each and every particle, and at the to the reases than the want of water were to the heat each and every particle, and at the to the heat each and every particle and at the to the heat each and every particle and at the to the heat each and every particle and at the to the heat each and theorem the understance of the said complaint for the end and their tween the understance of the said the substance of the said the substan

applied for. The furnace may be seen at work near Empire, or a photograph thereof may be seen at this office. Practical mill men seem to have great faith in its capability to do good work at greatly reduced prices. LA PAZ and PRESCOTT, ARIZONA -Carson Appeal.

REESE RIVER MINES .- The Austin Reveille

coming. The Great Eastern was located on From that date until the close of quantity of the mixture to the ton of sul- 1865 it was worked through an incline, from which was obtained small amounts of won-We cannot see anything either new or valuable in the treatment. A better thing was sent to the famous reduction works of period a change occurred in the manner of Chewing and Smoking Tobacco, working the mine. A vertical shaft was undertaken a few hundred feet east of the incline, on which was erected a house and powerful hoisting apparatus. The shaft was mine yielded ore of the finest quality the serve to show: Amount of ore extracted from June 1, 1866 to January 31, 1867, 800 tons; assay value of this amount of ore, shipped per Wells, Fargo & Co., \$183,667; cost of reducing 800 tons, \$37,363; loss in working, \$27,550, or fifteen per cent., which went up the chimney or down the stream exceeds by \$200 per ton the average yield of the ore procured from the Comstock during wonderful lamp.

BOUNDARIES OF VIRGINIA, MONTANA,-The

Helena Herald has the following: If a timid down-easter were to contemlarge scale, with or without modifications, plate the actual "boundaries" of some The saving of time and fuel will not be of our Rocky Mountain burgs, we opine he warrant a different conclusion, we should be own title everything cuphonius and inviting, happy to hear from him.—Scientific Press. yet read its boundaries: Bounded on the north by the British Lion (line), Bear's Paw, Prickly Pear, Last Chance and the stream of Missery (Missouri); on the east by Powder There is probably no service to which steel river, Bad Lands and hostile Indians; on the south by Polygamy and Snake river; on the

A VALUABLE BAR .- The Gold Hill (Nev.)

many millions of bright and beautiful silver A pick should never be "upset" or ham- bars, frequent mention has been made of sixteen hundred and seventy-five ounces When ready for hardening it should be g ld, \$10,563 86; silver, \$1,501 24 total,

### ON THE ORIGIN OF PRAIRIES.

In the American Association for the Ad the water should be cold; if the water is a paper "On the Origin of Prairies," was tougher pick, and one less liable to crack produced over half our continent a growth that we can execute work with dispatch, at the edges, than where salt water is used. of forests, and over the other half only a her. The last hammering of a pick should albaceous vegetation, but in this, as in so many ways be given on the flat sides, and across other questions that divided this scientific. been given above all appear to agree in. over the ground he had traversed would asharpening" should never be trusted to acted as condensers, and precipitated an amount of water which sustained a forest growth. The rain-fall was greater in that part of the continent east of the Missis-O'HARRA's DESULPHURIZER. - For a long sippi, and here we have almost an unbroken

ing so ruinously as our past experience has the presence or absence of trees. Belts same time gradually empties the cooked ore into the receptacle at the front, the ore being taken from the rear near the chimney. The cost of the furnace is slight, and ore can be roasted for less than three dollars per ton. A caveat has been filed and a patent has been forced.

A caveat has been filed and a patent has been forced.

S E. Darling.

E. Darling.

All persons indebted to the above firm are requested to call and settle with E. Darling.

Miring and Scientific Press Patent Agency, Newspaper, Book and Job Printing Office, who will continue the business at the old there only a change of climatic conditions who will continue the business at the old stand.

A caveat has been filed and a patent has been forcests.

LA PAZ ADVERTISEMENTS.

GRAY & CO.,

Merchants.

July 1, 1864. vin8

LA PAZ, MOHAVE, PRESCOTT CANH STORE.

The undersigned wishes to inform the public that in a few days he will receive by the schooner Tow-hando, a large stock of goods, comprising a large

Clothing, Boots and Shoe A fine assortment of Wines and Liquors,

Cigarito Paper Havana Cigara,

Dried Fruits,

120,000 lbs. Barley 1,000 sacks of Flour, 200 Sacks of Beaus.

A lot of Potatoes and Onions,

20,000 feet of Assorted Lumber, Windows and Sash Doors, Which he intends to keep constantly on hand at La Paz and Fort Mchave, and intends to sell the same

LOWEST POSSIBLE FIGURES FOR CASH.

MANUEL RAVENA.

LOS ANGELES ADVERTISEMENTS.

Caswell & Ellis.

WHOLESALE AND RETAIL DEALERS IN

STAPLE & FANCY DRY GOODS

GROCERIES, PROVISIONS, AND GENERAL MERCHANDIZE.

AGENTS FOR CALIFORNIA POWDER WORKS CO.

No. 1, Arcadia Block, Los Angeles Street, Los Angeles.

TOMLINSON &CO.,

FORWARDING AND COMMISSION

MERCHANTS. LOS ANGELES AND SAN PEDRO.

# save all kinds of Machinery repaired at this

Turning in Wood

IRON

PROMPTLY EXECUTED.

ZZ All work done in this establishment warranted, and our advantages are such Dried Fruit, BANNING & CO.

GROCERIES

ARCADIA BLOCK, Nos. 5 and 6. Los Angeles, February, 1866.

I. H. Levy and Co. Min-Street, San Bernardino, Cal. Dealers in DRY GOODS, CLOTHING, BOOTS and SHOES-Iron, Hardware-Crockery-Groceries and Great variety of General MERCHANDIZE.

L. B. JEWELL, WATCHMAKER AND JEWELLER,

With M. A. FRANKLIN, Druggist and Photo-SAN BERNABDINO, CALIFORNIA. Watches and jewelry sent by mail from Arizona carefully repaired and returned.

### Dissolution Notice.

PRESCOTT ADVERTISEMENTS.

# Ranchmen's Corrall

### FEED STABLE.

South side of the PLAZA, PRESCOTT,

Hay per day, \$1,00. Grain per 1b, 12 1-2 cents, reighters and others supplied with hay at 5c

## CAMPBELL & BUFFUM,

West side of the Plaza, Prescott, Arizona

GENERAL DEALERS IN GROCERIES & PROVISIONS, Foreign and Domestic Wines and Liquors,

TOBACCO AND CIGARS And a general assortment of such articles as fam-illes and miners need. Our goods are all of the best quality, and at reasonable prices.

FOR CASH ONLY. JOHN G. CAMPBELL, W. M. BUFFUM.

The undersigned, will continue the business of CARPENTERING, and HOUSE PAINTING, in all of its various branches, on

## A. G. DUNN.

QUARTZ MOUNTAIN MILL.

The attention of the public is called to the fact that we have renewed facilities for the manufacture of all kinds of lumber for building purposes, for mills and mining. Having become satisfied with the credit system as now practiced here, we have concluded from this time to cre it no one, and have fixed theprices of lumber at the mill as follows: For good merchantable dumber. \$60 per M

Second quality, \$30 per M. Clear lumber, \$100 per M. Terms, cash on delivery, payable in U. S. gold Prescott, Nov. 21, 1865. A. O. NOYES, Agent.

SELLING OFF.

CLOSE UP BUSINESS the total of the country of the same of the country of the coun

Prescott, Dec. 1st, 1866.



FEED AND SALE STABLE.

and correll with shods formerly owned by Wm. H. Hardy, is prepared to feed stock by the day or week on retsonable terms.

# JAMES GRANT

Flour,

Butter.

Lard, Coffee.

Sugar,

Candles.

Can Fruits and Vegetables,

Together with a general assortment of

Coal Oil,

# GROCERIES AND PROVISIONS

FOR SALE CHEAP AT THE

CASH STORE.

Prescott, January 20, 1866.

# Mining & Scientific

Volume Fourteen of the Mining and Scientific
Press, commencing January, 1867—Daway & Co.
Publishers,—Issued every Saturday, at our Book
and Job Printing Office, 505 Clay Street, corner
of Sansone, San Francisco.
Terms 18 Advance;—One year, \$5; six months
St. single conies 15 centes; monthly series, \$5.50

per year, or 65 cedts per number Back volumes from January, 1864, \$3 per volume; bound, \$5 per and answer as above required.

LEGAL ADVERTISEMENTS.

ADMINISTRATOR'S NOTICE Estate of Thomas D. Hutton, deceased,

Administrator of the above named estate, to the creditors of, and all persons having claims against the said deceased, to exhibit the same with the necessary vouchers, within one year from the date of this notice, to the undersigned, at his office in Tacson, Pima County and Territory of Arizona, Tracan, March 1, 1867. Tucson, March 1, 1867.

JOHN G. BRYANT,

ADMINISTRATOR'S NOTICE.

Estate of John F. Simmons, deceased.

NOTICE is hereby given by the undersign-ed, duly appointed Administrator of the above named estate, to the creditors of, and all persons having claims against said deceased, to exhibit the same, with the necessary vonchers, within six morths from the first publication of this notice, to B. Block, at his place of business in the town of Prescott, Yavapal County, Territory of Arizons.

B. BLOCK. Administrator. JNO. HOWARD, his Attorney. Prescott, April 1st, 1867.

ADMINISTRATOR'S SALE.

Territory of Arizona, County of Yavapai. N the Probate Court in and for said county,-in the matter of the Estate of P. M. Burns, deceased:—Pursuant to an order of the Hon. Hezekiah Brooks, Judge of said Court, notice is hereby given that on Monday the 1st day of May, A. D. 1807, in front of the store of James Grant, in the town of Prescott, in said county, at one o'clock in the afternoon of said day, I will cause to be soid at public auction, the following described property belonging to the estate of the above named deceased, to wit: One improved Ranch of one hundred and sixty (160) acres of land situated on the Hassayampa River, near Walnut.

eased, situated in Yavapal County and Territo ry of Arizona. , Terms of Sale—to be announced on the day of

situated on the Hassayampa River, near Wainut Grove. Also, the Quartz Mining interest of said

JAMES GRANT, Administrator.
ROBERT MEACHAM, Auct'r.
JNO. HOWARD, Attorney.
Prescott, April 1st, 1867.
7—te

ESTATE OF WILLIAM TRAHAN.

COUNTY OF YAVAPAL, N the Probate Court In the matter of I the Estate of William Traban, deceased: Pursuant to an order of the Hon. Hezeklah Brooks, Judge of said Court-Notice is hereby given to all Persons interested, to appear before him, on Monday the sixth (6th) day of May, 1867, at the office of the Check of the Probate Court, in the town of Prescott in said Com- to show

ESTATE OF LEROY SAY TERRITORY OF ARIZONA, 7

COUNTY OF YAVAPAL. N the Probate Court, in and for said County-In the matter of the estate of leroy Jay deceased. Pursuant to an order of the Hon. Hezekish Brooks, Judge of said Court, notice is hereby given to all persons intereseed, to appear before him on Monday the sixth [6th] day of May, 1867, at the office of the Clerk of the Probate court in the town of Prescoti, in said county, to show cause, if any they have, why an order should not be granted to the Administrator to sell the Real Estate belonging to said estate.

tate belonging to said estate.

KING S. WOOLSEY, Administrator.

WM. J. BERRY, his Accorney. Prescott, April 1, 1867.

In the Destrict Court of the Third Judicial District, County of Yavapai and Territory of Ar-

Defendants.

Van C. Smith, and F. G.

Christie,

L. C. Gray, Chas. E. Hitch-

Plaintiffs, 50 cent internal reven. stamp cancelled.

Christie, Defendants.

A CTION brought in the District Court of the Third Judicial District, in and for the County and Territory aforesaid. The Territory of Arizona sends greeting, to Van C. Smith and F. G. Christie, Defendants —You are hereby required to appear in an action brought against you by the above named Plaintiffs, in the District Court of the Third Judicial District in and for the county of Yavapai, and Territory of Arizona, to answer the complaint filed therein is copy of which accompanies this summons) within twenty days (exchange). panies this summons) within twenty days (exchasive of the day of service) after service upon yea of this summons, if served within this county, but if without the county and within the Territory, forty this summons, if served within this county, but if without the county and within the Territory, forty days; and if service be made upon you out of the Territory, then within twenty days. This action is brought to recover the sum of six thousand five hundred and thirty four (§6,534) dollars, with ten per cent. per annum interest thereon from the 15th day of March, A. D. 1807, on a premisory note dated December 15th, 1866, executed and delivered by you to plaintiffs, payable to the order of Gray & Co. and to foreclose a mortgage of the same dake as the said note, given by you to secure the payment of the said note, on the following described property, that is to say: That certain five stamp quarts utill situated near the Sterling mine, in the Hassayampa mining district, in the county of Yavapal and Territory of Arisona, and about the and a hif miles in a southerly direction from the town of Prescott, in said county. The said quarty mill being known as, and commonly called the Sterling Mill. Also all the interest of F. G. Christie in and to the following quartz leads and mineral veins, that is to say: three hundred and acventy.

hundred and seeming fire to

[L. S.] Clerk of the District Court. By J. M. BOGGS, Deputy. J. P. HARGRAVE, Arry for Plaintiff.

Greenbacks taken at par at the Arizona

ar attention will be given to drawings of of machinery. Parties purchasing ma-ill be furnished with a set of drawings of